

Amendments to the Claims

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

Listing of Claims

1. (currently amended) Light unit for generating light beams having various wavelengths, including
  - a light source unit (34),
  - a mirror unit (80),
  - a support unit (30),
  - an exit window (50) having an opening (60), and
  - a pressure-generating element (32),the light source unit (34) and the pressure-generating element (32) being contained in the support unit (30), which exhibits a longitudinal axis (40) running substantially parallel to the generated light beams, the mirror unit (80) and the exit window (50) being arranged on opposite ends of the support unit along and substantially traverse to the longitudinal axis (30), and a force being generated with the pressure-generating element (32), which force acts on the light source unit (34), wherein at least one of the mirror unit (80) and the exit window (50) is at least one of displaceable along the longitudinal axis relative to the support unit (30) and tiltable relative to the longitudinal axis (40) by at least one displacement element (52, ..., 55) in dependence on the force generated by the pressure-generating element (32) on the light source unit (34).
2. (previously presented) Light unit according to Claim 1, wherein a force on the light source unit (34) can be generated from a plurality of sides with the pressure-generating element (32), the force acting substantially perpendicularly to the longitudinal axis (40).

3. (previously presented) Light unit according to Claim 1 , wherein a force, uniform all around, can be generated on the light source unit (34) with the pressure-generating element (32).

4. (previously presented) Light unit according to Claim 1, wherein the pressure-generating element (32) is of piezoelement type, based on a material selected from the group consisting of sodium persulfate, sodium hydroxide, and copper sulfate.

5. (previously presented) Light unit according to Claim 4, wherein the piezoelement (32) is a tourmaline crystal that has an electrically conductive film selected from the group consisting of silver and aluminum for contacting on the sides facing toward and away from the light source unit (34).

6. (previously presented) Light unit according to Claim 1, wherein the exit window (50) is selected from the group consisting of a semitransparent window and a Brewster window (51).

7. (previously presented) Light unit according to Claim 1, wherein the exit window (50) and the mirror unit (80) are displaceable in such fashion that the light source unit (34) is always arranged centrally between the exit window (50) and the mirror unit (80).

8. (previously presented) Light unit according to Claim 1, wherein the displacement element comprises at least one piezoelement (52, ..., 56).

9. (previously presented) Light unit according to Claim 1, further comprising an insulation layer (61) between the mirror unit (80) and the support unit (30) and between the exit window (50) and the support unit (30).

10. (previously presented) Light unit according to Claim 1, wherein the light source unit is a laser diode unit (34) of the semiconductor laser type.

11. (currently amended ) Method for generating light beams having various wavelengths through the use of a light unit including

- a light source unit (34),
- a mirror unit (80),
- a support unit (30),
- an exit window (50) having an opening (60), and
- a pressure-generating element (32),

the light source unit (34) and the pressure-generating element (32) being contained in the support unit (30),

which has a longitudinal axis (40) running substantially parallel to the generated light beams, the mirror unit (80) and the exit window (50) being arranged at opposite ends of the support unit (30) along and substantially transverse to the longitudinal axis, a force acting on the light source unit (34) being generated with the pressure-generating element (32), and the method comprising displacing at least one of the mirror unit (80) and the exit window (50) along the longitudinal axis relative to the support unit (30) and tilting said at least one of said mirror unit and exit window relative to the longitudinal axis (40) by at least one displacement element (52, ..., 56) in dependence on the force generated by the pressure-generating element (32) on the light source unit (34).

12. (previously presented) Method according to Claim 11, including generating said force on the light source unit (34) from a plurality of sides with the pressure-generating element (32), the force acting substantially perpendicularly to the longitudinal axis (40).

13. (previously presented) Method according to Claim 11 , wherein said force generated on the light source unit is uniform all around.

14. (previously presented) Method according to Claim 11, including displacing the exit window (50) and the mirror unit (80) in such fashion that the light source unit (34) is always arranged centrally between the exit window (50) and the mirror unit (80).

15. (previously presented) Method according to Claim 11, including setting the spacing between the mirror unit (80) and the exit window (50) such that the distance of said spacing is exactly equal to, or a multiple of, half the wavelength of interest.